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DESCRIPTION OF A NEW *ELEOTRIS* FROM ANNOBON  
ISLAND  
(PISCES, GOBIIDAE)

Some fishes from the collections made by the famous explorer Leonardo Fea on Annobon (Gulf of Guinea) in 1902 have remained unidentified until now. Among these fishes we found several specimens of *Gobius bustamantei* Greef 1882 and a hitherto unknown species of *Eleotris* which is described hereafter.

***Eleotris feai*** n. sp. (fig. 1)

**D i a g n o s i s** - An *Eleotris*-species similar to *E. wittata* Dumeril (1860) but differing mainly by a more elongate body and by a higher scale-count in the longitudinal line (70-73 against 55-62) and in a transversal series (about 25 against 19-22).

Named after the collector (see above).

**H o l o t y p e** - A specimen of 157,5 mm total length and 124,5 mm standard length, collected on Annobon island during April-May 1902 by L. Fea; preserved in the Museo Civico di Storia Naturale, Genova (Italy), number of catalogue: MSNG 44577.

**P a r a t y p e s** - Eleven specimens of 117-224 mm total length and 96-181 mm standard length. Nine are in Genoa (MSNG 44578), one in Tervuren (MRAC 74-45-P-1), one in London (BMNH 1974.5.13.1). Locality and other data as for the holotype. All the material is in good condition, but exact measurements are not always possible.

**D e s c r i p t i o n** - (Numbers in parentheses concern the paratypes). Body elongate, cylindrical, caudal peduncle slightly compressed.

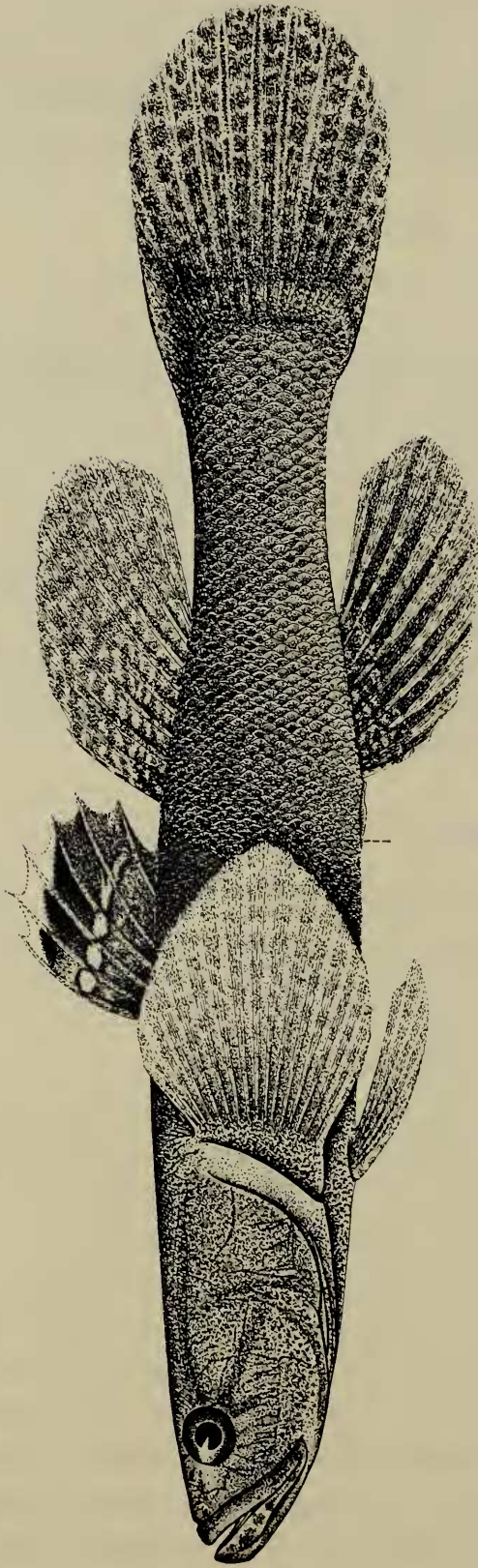


Fig. 1 - *Eleotris feai* n.sp. Is. Annobon. Holotype. Total length 157,5 mm.

Body depth 15,7 (16,5) % of standard length. Length/depth of caudal peduncle: (1,80) 2,10. Head somewhat depressed, longer than broad, broader than deep, scaly above from between eyes. Cheeks naked with numerous vertical parallel pitlines. Also parallel pitlines on the sides of the snout from above eyes. Operculum with small scales, deeply embedded in the skin, a strong spine at lower angle of preoperculum. Mouth large, extending to below center of eye. Snout rounded when seen from above, lower jaw strongly projecting. Teeth small, all conical, in bands, or more or less in rows; teeth of the innermost row a bit larger and curved inward especially in the median area of the upper jaw and in the lateral parts on lower jaw.

Length of head (21,8) 34,9% of standard length. Width of head 64,4 (70)% of headlength. Length of snout 17,2 (22,8)% of headlength. Diameter of eye (12,1) 14,9 (18) % of headlength. Interorbital width: distance between eye-rims (25) 27,6 (30,7) % of headlength; bony distance 14,9% of headlength.

Gill-rakers short and rounded, 9 on the lower part of first gillarch and 3 on the upper part.

Pectoral fin rounded, its base rather muscular, fin length (60) 63,2 (70) % of headlength; posterior margin just reaching level of anus. Postpectoral area of sides with several vertical pitlines. Ventral fins separated, shorter than pectorals, median rays longest, inserted just below root of pectorals. Anterior dorsal fin with 6 flexible unbranched rays, inserted well behind the root of pectorals, longest spine (3rd) (38) 43,7% of headlength; upper margin emarginate between the finray tips. Posterior dorsal rounded with 9 soft rays, the first one not branched, longest soft ray (5th or 6th) (40,4) 52,9 (60)% of headlength, front end of fin just before front end of anal and only narrowly separated from anterior dorsal. Anal fin rounded with 9 soft rays, the first one not branched, longest fin ray (40) 54 (60) % of headlength. Caudal fin rounded, (70,2) 75,9 % of headlength, equal to it in the smallest specimen.

Scales ciliate, those on belly and just behind basis of pectorals smaller and hidden under the skin, (70) 72 (73) scales in the midlateral series, 24-26 scales in a transversal line between front end of second dorsal and anal.

General colour (in alcohol) greyish. First dorsal fin darker with two horizontal whitish transparent bars, one in the middle of the fin, the other near the border. The upper part of the fin, between the bars,

is darker and even blackish between 2nd and 5th ray. Second dorsal, anal and caudal greyish, spotted with whitish or transparent. Paratypes of largest sizes have a dark colour, a little lighter ventrally; some are almost black.

**D i s c u s s i o n** - The systematics of the West-African *Eleotris* has been cleared up by BOESEMAN (1963) and his schema was adopted by DAGET & ILLIS (1965). According these authors there are only three *Eleotris* living along the coasts of West Africa, nl. *E. vittata* Dumeril 1860 (formerly often mentioned as *E. monteiri*, a junior synonym) with more than 55 scales in midlateral line, and *E. senegalensis* Steindachner, 1870 and *E. daganensis* Steindachner 1870, two strongly related nominal species both with less than 55 scales in midlateral line. THYS (1967) identified numerous specimens from Fernando Poo all as *E. vittata* and indicated 56-60 as midlateral scale-count, whereas BOESEMAN (1963) mentioned 60-62 for fishes from the Niger-delta. The numbers 60-70 as indicated by BOULENGER (1916) and copied by DAGET & ILLIS (1965) probably are a bit too high and include scales on the caudal fin. The midlateral scale count for *E. vittata* probably is around the 56-62 range.

Recently BLANC & CADENAT & STRAUCH (1968) described a new species *Eleotris annobonensis* from Annobon. According to these authors this nominal species is very near to *E. vittata*, but differs from it by a longer body, a sharper snout, the truncate shape of the caudal and the lower finray counts on dorsal and anal, and by the absence of a black spot on the first dorsal. The finformulas as given for *E. annobonensis* by its describers, nl. D VI, 1.8 and A 1.8 however are exactly the same as in *E. vittata*, and these numbers are extremely constant in this species. The elongation of the body is almost exactly as in *E. vittata*, at least as far can be deduced from the figure of the holotype as no morphometric data are given in the description of *E. annobonensis*. The shape of the snout is also as in *E. vittata*, but here again no morphometric data are given. The shape of the tail, truncate in *E. annobonensis*, is also truncate in young and subadult *E. vittata* and only large adults of the latter can have the caudal more or less rounded.

In *E. vittata* the anterior dorsal fin has a dark horizontal bar near the basis and another one in the upper half, this distal bar can be grayish to very black, and can be surmounted by a large or a very small transparent margin, sometimes only the tips of the finrays being

paler. There is much individual variation on this character and coloration of the first dorsal, as seen on the drawing of the holotype of *E. annobonensis* that does not differ from the normal *E. vittata* pattern. *E. annobonensis* thus most probably is a junior synonym for *E. vittata*. The midlateral counts given for *E. annobonensis* however are a bit larger than those we notices for *E. vittata* (59-67 against 56-62) although this may be caused by a somewhat different method for scale countings.

The new species *E. feai* was compared to specimens of *E. vittata* from Fernando Poo (see description in THYS, 1967) and from the coastal areas from Zaire, Gaboon, Cameroon, Dahomey, Ivory Coast and Niger delta (Port Harcourt). *E. feai* differs mainly from *E. vittata* by a more elongate body (body depth 15,7-16,5% st. L. against 19,7-20,8) and by higher scale counts in midlateral line (70-73 versus 56-62 (67) and in transversal line (about 25 versus 19-22). Further differences are the more rounded shape of the caudal fin, the more uniform coloration of the sides and the absence of a black spot at the base of the pectoral fin; the diagnostic value of these latter differences however is weakened by the fact that there is no information on the young stages and on the morphologic variation of *E. feai*.

#### BIBLIOGRAPHY

- BLANC M., CADENAT J. and STRAUCH A., 1968 - Contribution à l'étude de l'ichthyofaune de l'île Annobon - *Bull. I.F.A.N.*, **XXX**, A, (1): 238-256.
- BOESEMAN M., 1963 - An annotated list of fishes from the Niger Delta - *Zool. Verh.*, **61**: 47 pp.
- BOULENGER G.A., 1916 - Catalogue of the Freshwater Fishes of Africa in the British Museum (Nat. Hist.) - IV. London: 392 pp.
- DAGET J. et ILTIS A., 1965 - Poissons de Côte d'Ivoire (eaux douces et saumâtres) - *Mém. I.F.A.N.*, **74**: 385 pp.
- THYS VAN DEN AUDENAERDE D., 1969 - The Freshwater Fishes of Fernando Poo - *Verh. Kon. Vl. Acad. Wetensch. Belg. Kl. Wet.*, **XXIX** (1967), (100): 167 pp.

#### RIASSUNTO

Viene descritta una nuova specie di Gobide (*Eleotris feai*) dell'isola Annobon (Golfo di Guinea). Essa appare affine a *E. vittata* Dum., ma ne differisce soprattutto per avere corpo più allungato, squame più numerose, pinna codale più arrotondata.

#### RESUMÉ

On décrit une nouvelle espèce de Gobiidé (*Eleotris feai*) de l'île Annobon (Golfe de Guinée). Elle paraît proche de *E. vittata* Dum., mais en diffère surtout par son corp plus allongé, les écailles plus nombreuses, la nageoire caudale plus arrondie.